

DETAILED ACTION

This office action is in response to applicants' communication filed on 6/8/11.

Claims 1-6, 9-29, and 33-37 are pending in this application. Claims 9-29, 35 and 37 stand withdrawn from the consideration being drawn to the non elected invention.

Rejection of claims 1-6 and 28 under 35 USC 112, first paragraph is hereby withdrawn, subsequent to applicants' amendments and arguments.

Rejection of claims 1-3 under 35 USC 102(b) over US 3,577,458, or by US 3,465,024, or by US 6,713,646 are hereby withdrawn, subsequent to applicants' amendments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hurd et al(J. org. Chem., abstract only).

Hurd et al, the chemical structure at the bottom of the abstract, anticipates instant claims. See below.

ORIGINAL REFERENCE NO.: 40:4665e-1,4669a-b
TITLE: Hydroxamic acids from aliphatic dicarboxylic acids
AUTHOR(S): Hard, Charles D.; Botterton, Donald G.
CORPORATE SOURCE: Northwestern Univ., Evanston, IL
SOURCE: Journal of Organic Chemistry (1946), 11, 207-14
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 40:23824
GI For diagram(s), see printed CA issue.
AB Some hydroxamic acids of dicarboxylic acids are prepared and their rearrangement is studied. The following Na hydroxamates are prepared by mixing 1 mol. of the corresponding ester, 2 or more mols. H₂NOH, and 2 mols. EtOH in absolute EtOH. Na malonohydroxamate (I) crystallizes with 1 mol. EtOH; free acid, obtained from I with HCl, m. 144-7°; Et derivative (II), prepared in 66% yield by shaking I with 2.5 mols. EtOH in ether suspension, m. 177-8°. Na succinohydroxamate (III) crystallizes with 1 mol. EtOH; the free acid (IV) is prepared via its Cu salt and H₂S (NH₄ salt m. 180-1°), Et derivative, prepared in 88% yield by refluxing IV with EtOH and pyridine in CH₂Cl₂, m. 134-5°. When III is shaken with EtOH cyclization takes place with formation of O.CO.CH₂.CH₂.C(=O)N or O.CO.CH₂.CH₂.CO.NH₂. Methylsuccinohydroxamate

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- on acidification with 2 mols. AcOH or on treating its Cu salt with H₂S gives the free acid, m. 165-5.5°, in 75-85% yield; Et derivative (V), prepared in 70% yield in the same way as II, m. 187°. Na sebacohydroxamate crystallizes with 1 mol. H₂O, and on acidification with AcOH gives 52% free acid, crystallizing with 1 mol. H₂O, m. 134-6°; Et derivative (VI), prepared as II in 66% yield, m. 182-3°. The Na salts of II (VII), of V (VIII), and of VI (IX) are prepared by addition of 2 mols. EtOH in 25-30 cc. absolute EtOH to a suspension of 1-2 g. of the acid in 25-30 cc. absolute EtOH. When VII is boiled with 0.1 mol. NaOH, 24% CO(NH₂)₂, m. 237-8°, is formed. With an excess of alkali at room temperature for 10 hrs. saponification takes place with formation of I, identified as NH₄ hydrogen malonohydroxamate, m. 142-3°. When 18.1 g. VIII in 190 cc. H₂O is boiled, 13.6 g. EtOH and 4.66 g. high-melting product (X) are obtained. When 2 g. X is hydrolyzed by heating it with concentrated HCl, 2.32 g. crude putrescine-HCl is formed and is identified as benzoylputrescine, m. 176-7°. When 5 g. IX is boiled in 48 cc. H₂O, 2.9 g. of a white ash-free precipitate (XI), m. 165-220°, insol. in alkali and acid, seps. Hydrolysis of 2.32 g. XI by heating it with concentrated HCl for 21 hrs. at 155° gives 2.1 g. 1,8-octanediammonium chloride in addition to 0.24 g. EtOH. Ac derivative of the free diamine, m. 127-8°; Et derivative, melts when immersed in a bath at 155° but instantly solidifies and remelts at 171° (cf. Muller and Kandelmann, C.A. 35, 5120.5).
- II 5330-95-0F, Hydroxylamine, N,N'-succinylbis[O-benzoyl-77268-26-3F, Hydroxylamine, N,N'-malonylbis[O-benzoyl-583014-25-1F, Hydroxylamine, N,N'-adipylbis[O-benzoyl-RL: PREP (Preparation)
(preparation cf)
RN 5330-95-0 ZCAPLUS
CN Butanediamide, N,N'-bis(benzoyloxy)- (SCI) (CA INDEX NAME)



Claims 4-6, 33-34, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. **Note that in claim 33, applicants need to delete some compounds that do not read on the elected subject matter.**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAILENDRA KUMAR whose telephone number is (571)272-0640. The examiner can normally be reached on Mon-Fri/5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sullivan Daniel can be reached on (571)272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Kumar
8/25/11

/SHAILENDRA KUMAR/
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